



## Maine Department of Environmental Protection

### Underground Storage Tank Inspector

#### REFERENCE HANDBOOK 2006/7

### General Instructions

- A. Leak detection equipment and procedures, spill buckets, overfill prevention devices and Stage I vapor recovery equipment must be checked or tested annually for proper operation and performance. Cathodically protected tanks and piping must also be checked annually to insure they are adequately protected from corrosion.
- B. The UST Annual Inspection Report and Summary Report must be used to document the following activities: 1.) Annual inspection and testing as described above. 2.) Testing of replacement sensors, probes or other system components and re-evaluation of the proper performance of leak detection procedures to update the results of an annual evaluation.
- C. All work associated with testing of equipment and checking of procedures must be performed under the direct, onsite supervision of a Maine certified underground storage tank installer, or a Maine certified tank inspector.
- D. The tank owner is responsible for assuring a copy of the passing UST Inspection report and Summary report is submitted to MeDEP by July 1 each year. Completed UST Annual Inspection Reports and Summary Reports should be mailed to Annual Tank Inspections, Maine Department of Environmental Protection, 17 State House Station, Augusta, ME 04333. The facility owner must keep a copy for their facility records. The MeDEP strongly recommends the tank inspector also keep a copy for their records. As a courtesy, the tank inspector may send a copy of the report to the Department.

### Inspection Summary

- A. You must complete the appropriate sections of the Annual Inspection report before you can complete the Inspection Summary Report.
- B. At the top of the page, print the facility name, location (city or town), owner, operator, MeDEP registration number and the telephone number of the owner.
- C. In the upper left corner of the table indicate whether this is the initial annual inspection or an Inspection Update. Inspection Updates are required for tanks that do not pass the initial inspection each year. If, upon completion of repairs to bring a facility into compliance a FULL inspection is performed, please indicate on the form that the inspection is BOTH an UPDATE and a new INITIAL INSPECTION. This will allow a full 12 months between FULL inspections.
- D. Fill in the tank and chamber # for each tank you inspect. For compartmented tanks, list each compartment separately (i.e. 7-1, 7-2). Use an additional sheet if you inspect more than 4



## Maine Department of Environmental Protection

# UST Inspector Reference Handbook

tanks or chambers at a facility. If you are unsure of the tank number or chamber number, check the facility registration on site or contact the Department.

- E. Indicate the volume and product stored in each tank or chamber.
- F. For every row, check the appropriate box to indicate whether each tank Passed or Failed. If the tank is not required to use that method of leak detection, spill or overfill prevention Stage I vapor recovery or cathodic protection then check N/A – Not Applicable.
- G. For each tank check Pass or Fail at the bottom of the column. If the tank fails any of the inspections listed above then check Fail.
- H. The inspector must sign and date the Summary report at the bottom after completing the inspection.

## UST Annual Inspection Report

- A. This section includes instructions for inspecting each of the systems listed in the Annual Inspection Summary Report.
- B. For each tank you will need to inspect the primary leak detection system – Daily Inventory, Automatic Tank Gauging, Interstitial Monitoring or Groundwater Monitoring. Only a very few onsite heating oil tanks, installed before Sept. 16, 1991, will not have a primary leak detection system.
- C. Some tanks may have more than one leak detection system in place. Inspect the one the owner is using to meet MeDEP leak detection requirements.
- D. Piping leak detection, spill prevention and overfill prevention systems, Stage I vapor recovery and crash valves should also be inspected. Check the instructions for each one to determine whether the tank is required to have that system in place.
- E. Use an X or a checkmark in the appropriate column to indicate whether the answer is Pass or Fail for each applicable question. If there are more than 4 active tanks at a location, use additional pages.
- F. Only the UST Annual Inspection Report pages you have completed need to be submitted. For example, if the tanks/piping are not cathodically protected and there are no Out-of-Service tanks then you do not need to submit page 8.
- G. Questions are numbered in order. If you need more information about a particular question call 1-800-452-1942 or 207-287-2651 and ask to speak to someone in the TANKS unit.



## Maine Department of Environmental Protection

# UST Inspector Reference Handbook

### Daily Inventory

The following tanks may use Daily inventory for leak detection.

- A. Singlewalled (SW) tanks installed before 10/91 and protected against corrosion.
- B. Doublewalled tanks installed before 10/91 without electronic interstitial monitoring. (The tank interstitial space must also be monitored manually)
- C. DW electronically monitored tanks with SW pressurized piping (piping only). Remember to also inspect the electronic monitoring system for the tank.
- D. DW electronically monitored tanks with suction piping that is not properly sloped (piping only). Remember to also inspect the electronic monitoring system for the tank.

Tank owners or operators using daily inventory are required to collect inventory data every day product is added to or removed from the tank.

To calculate daily inventory, the owner/operator must read each totalizer, measure the product and water level in each tank and keep a record of deliveries to the tank (gallons and date). Each day the owner/operator must calculate how much they are over or short.

At the end of each month the owner/operator must perform a monthly leak check by comparing the monthly inventory overage or shortfall to the total monthly throughput. See the Appendix for an example of daily inventory data and monthly leak check.

If the monthly overage or shortfall exceeds 1% of throughput, that is evidence of a possible leak and must be reported to the Department within 24 hours. The easiest way to do this is to fax a copy of the results to MEDP at 207-287-7826. ( Be sure the station name, address and reg# is on the inventory so we know where the report came from.)

You will need to see a copy of the previous month's inventory in order to do your inspection. For example, if you inspect a station in July, you will need a copy of June's inventory record.

1. Check to see if the owner did a monthly leak check for the previous month.

To do a monthly leak check, the owner must total the gallons pumped for each tank (or tank system if two or more tanks are manifolded together) for the month and compare this number to the overage or shortfall for the month.

2. If the monthly overage or shortfall exceeds 1% of gallons pumped, this is evidence of a possible leak and must be reported to the Department.



## Maine Department of Environmental Protection

# UST Inspector Reference Handbook

3. Check to make sure there is a drop tube installed in the fill. If daily inventory is used for leak detection there must be a drop tube installed in the fill, regardless of the type of fuel stored.

*If product level is determined manually*

4. Check the gauge stick to make sure the markings are in 1/8<sup>th</sup> inch increments and legible for the entire length.

Make sure it is not bent, broken or cracked, the end is not worn and the plastic button is still in place on the bottom.

*If product level is determined using an Automatic Tank Gauge (ATG)*

Check the water sensor following the instructions under ATG (instruction 8 below).

Check the product sensor following the instructions under ATG (instruction 9 below)

Verify the ATG system inventory is the same as actual stick inventory.

Complete any other periodic inspection per the manufacture's instructions.

## Automatic Tank Gauging

Automatic tank gauges (ATG's) may be used for leak detection on **single walled tanks only**.

An ATG may not be used as the primary leak detection method on a waste oil tank without written permission from the ATG manufacturer on file with The Department.

You will need to inspect the in-tank test results, and possibly the product inventory records, for the 30 days before your inspection to confirm if a facility is in compliance. MeDEP regulations require the ATG perform a passing 0.2gph test at least once every 30 days. The owner needs to keep three years of test records on-site or available on short notice.

Static (overnight) tests must be performed with the tank at least 60% full. Continuous tests (e.g., CSLD, SCALD) must be performed with test data from within 10% of the high level during the proceeding 30 days. For systems that do not report the tank volume at the time of the test or track the highest product level, the tank volume during testing can be estimated by comparing inventory records with the test report. A "Last Fullest 0.2 Pass" –type of test report will aid with this comparison when inspecting Continuous systems.

**Important:** If the Facility Registration indicates that the leak detection method is Daily Inventory & SIA or Groundwater Monitoring, be sure to fill out the appropriate section.



## Maine Department of Environmental Protection

# UST Inspector Reference Handbook

**Important:** If a tank has singlewalled pressurized piping it must also have electronic line leak detector that tests for a 0.2gph leak at least once every 30 days or continue to perform daily inventory and SIAs. Please see the section covering Line Leak Detection for requirements.

5. Enter the make and model number of the ATG and the test method in the space at the top of the section.
6. Check to make sure the monitoring console is present and working properly. The indicator lights and horn must be working and if the console is equipped with a printer, it must be in working order.
7. Check to make sure a 0.2 gph test was run in the last 30 days with the tank at an appropriate volume (greater than 60% for Static or within 10% of the 30-day high for Continuous).

To confirm the ATG probe is functioning properly:

8. Water sensor check
  - A. Remove the ATG probe from the tank and place it carefully on the ground.
  - B. Place the water sensor float flush with the bottom of the probe shaft and the product float near the middle of the probe shaft.
  - C. Move the water float up to a point higher than the high water alarm set point. The monitor must respond with a high water alarm report.
9. Product level sensor check
  - A. Check the product height reading on the monitor (allow enough time for the monitor to respond)
  - B. Measure the distance from the bottom of the probe to the bottom of the product float and make sure it matches the reading on the monitor.
  - C. Reinstall the probe in the tank and take an initial fuel level reading.
  - D. Dispense 3-5 gallons of gas. Take a second fuel level reading and verify the change is the same as the amount dispensed.

Complete any other periodic inspection actions required by the manufacture's instructions (e.g., check battery function, print out & review console set-up).



## Maine Department of Environmental Protection

# UST Inspector Reference Handbook

### Groundwater Monitoring

Groundwater monitoring wells are installed in the backfill around a tank to monitor the groundwater for the presence of oil.

They may only be used to monitor for leaks from singlewalled consumptive use heating oil tanks and only if no other leak detection method is available.

Department regulations do **not** allow monitoring wells to be used as the primary leak detection method for doublewalled tanks or for motor fuel tanks, marketing and distribution tanks or waste oil tanks.

10. Check to make sure the monitoring well riser is accessible. Make sure the lid has not been cemented or paved over.
11. Check to make sure monitoring wells are clearly marked and properly secured. The well must be distinguished from a fill cover and the riser must have a liquid-proof cap.
12. Check to make sure there is a bailer to sample the well and that it is clean and operational. It should be clear enough to determine if there is floating product on the water sample inside. (Suggestion: Disposable bailers are relatively cheap. It is helpful to keep some with you to supply sites where the bailer is lost, broken or dirty. Keep these replacement bailers in a clean location in your truck).
13. Make sure there is water in the bottom of the well. If there is no water or not enough to bail then the system is not in compliance.
14. Bail a sample of water from the well and make sure there is no floating product or smell of oil. If there is floating oil or the smell of oil then the system fails (Note: floating oil or a smell of oil is evidence of a possible leak and must be reported to the Department within 24 hours).
15. Check to make sure the owner/operator has kept a weekly written log of the monitoring well inspections. (see Appendix for an example logsheet). There should be at least one month's records available with weekly entries.

### Interstitial Monitoring (tank and piping)

Fill out this section for each facility where the tank or piping is secondarily contained.

Only DW tanks or DW piping installed prior to October 1, 1991 may use manual monitoring as part of the leak detection system (if electronic monitoring was not installed).

If manual monitoring is used on tanks where throughput is metered, the owner/operator must also keep daily inventory and perform an annual SIA.



## Maine Department of Environmental Protection

# UST Inspector Reference Handbook

16. If the interstitial monitoring system is electronic, enter the make and model number of the system in the space at the top of the section.
17. Indicate whether the monitoring system is electronic (E) or manual (M). Enter an X if either the tank or the piping uses another system of monitoring. Enter an X under Disp. if there is no dispenser sump probe.

### For Manual Monitoring

18. The interstitial monitoring sump should be accessible to allow the owner or operator to check weekly for the presence of oil and water. If the access cover is cemented shut or the cap to the interstitial space is rusted on and you cannot gain access before you leave then the system fails. There should be a removable cap to keep dirt and water from entering the interstice.
19. The owner/operator must keep a written log of the results of weekly monitoring of the interstitial space. See Appendix for an example. There should be at least one month's worth of weekly entries available for your review.

### For Electronic Systems:

20. The monitoring console must be fully operational including horn, lights and printer (if it has one). Explain any problems in the Comments section.
21. Sensors must be properly placed.

For dry interstice tanks, check to make sure the probe is located at the bottom of the tank interstice.

For fiberglass tanks, this will mean using a string and following the manufacturer's instructions to assure the probe is properly located. If there is not a string installed in the interstice when you do an inspection, one must be installed to assure the probe is at the bottom of the tank.

For brine solution tanks, check both the high and low level alarms.

For piping sump probes, the sensor must be installed according to the manufacturer's requirements and as close to the bottom of the sump as possible. See Appendix for list of manufacturer's websites and contact names and phone numbers.

22. All sensors must be tested for proper operation. Follow the manufacturer's instructions.





## Maine Department of Environmental Protection

# UST Inspector Reference Handbook

The interstitial sensor must be removed from the tank and tested for proper operation. Piping and dispenser sump probes may be tested without being removed from the sump.

Abuse of a probe to create an alarm is not allowed.

Pressing the test button on the console is not sufficient to confirm proper operation of the probe.

The system must alarm when the probe is exposed to liquid.

### For All Systems:

23. Check to see if the piping sump is liquid tight. A tightness test is not required but if the sump has an obvious hole or crack, penetration boots are not properly in place, or the sump cover is damaged, indicate **FAIL**.
24. Check the piping sumps and tank interstice for oil. This includes the tank interstitial space, the piping sump and the dispenser sumps.

Oil in any sump is evidence of a possible leak. It must be reported to the Department.

For piping and dispenser sumps, if you remove the oil and repair the leak before leaving the site, a passing result can be recorded. Remember, you may repair submersible pumps only if you are certified by the pump manufacturer to work on their systems.

Always record oil in the tank interstice as a failing result.

Note any repairs you make to correct or prevent further leaks.

25. Check the piping sumps and tank interstice for water. This includes the tank interstitial space, the piping sump and the dispenser sumps.

Water in any sump is evidence of a possible leak. It must be reported to the Department.

If you remove the water before you leave the site, a passing result may be recorded. Otherwise a failing result must be recorded.

Note any repairs you make to prevent further leaks.





## Maine Department of Environmental Protection

# UST Inspector Reference Handbook

### Overfill Prevention

Overfill prevention is required on all underground tanks installed after Sept. 16, 1991. The exception is consumptive use heating oil and process oil tanks smaller than 1101 gallons.

Motor fuel tanks, marketing and distribution tanks and waste oil tanks are all required to have overfill prevention, regardless of when they were installed.

(Note: Oil and Solid Fuel Board rules require a vent alarm on all #1 and #2 heating oil tanks under 5000 gallons.)

26. Enter the type of overfill prevention - ball float (B), Auto shut off/flapper (F), electronic high level alarm (E), or vent whistle (V). If the tank does not have and is not required to have overfill protection enter X in this space.

If the tank is required to have overfill protection and none was installed or there is no access for inspection, enter X in this space and check FAIL at the bottom of the column. Explain in Comments section.

#### Ball float

These devices are used on tanks that receive drop deliveries. After December 24, 1996 Department regulations prohibit the installation of ball floats on tanks served by a suction pump system. Ball floats installed on suction systems **may not be repaired**. If the ball float fails, it must be replaced with a different type of overfill prevention device.

27. The ball/float device must be accessible for inspection. Remove the ball float and make sure the ball is present and moves easily in the cage. Make sure the ball has not cracked and filled with product.
28. Check to make sure the ball seats when the tank is 90% full or less.

#### Auto shutoff/Flapper

These devices are used on tanks that receive drop or pump off/tight fill deliveries. They are installed in the fill riser.

29. The Flapper must be accessible for inspection. Remove the device from the fill riser and check to make sure it is in working order and no parts are damaged or missing.
30. Check to make sure the device closes when the tank is 95% full or less.

#### Electronic High Level Alarm

These devices may be used regardless of the type of delivery to the tank. A probe is installed in the tank to monitor product level. A horn sounds to warn the delivery driver before the tank is overfilled.



## Maine Department of Environmental Protection

# UST Inspector Reference Handbook

31. The in-tank probe must be accessible for inspection.

Remove the probe from the tank and place it carefully on the ground. Slide the product float up slowly until the high level alarm sounds. Check to make sure the probe slides easily along the shaft.

Check to make sure the horn is clearly audible to someone standing at the fill.

32. Measure the distance from the bottom of the probe to the bottom of the product float. Check to make sure system alarmed when the probe float was at 90% full or less.

### **Vent whistle**

These devices may only be used on consumptive use heating oil tanks receiving pump off, tight fill deliveries.

33. Check to make sure the whistle is working properly.
34. Check to make sure the vent whistle has been installed so the whistle will stop when the tank is 90% full or less.
35. Check to make sure the vent whistle is within 8 feet of the fill.

### **Spill Buckets**

Department regulations require spill buckets on all motor fuel, waste oil and marketing and distribution tanks.

Consumptive use heating oil tanks smaller than 1101 gallons are not required to have spill buckets.

Consumptive use heating oil tanks installed before September 16, 1991 are not required to have spill buckets.

If a facility has a spill bucket it must be maintained.

Enter the Tank #'s only for tanks or chambers required to have spill buckets and tanks and chambers with spill buckets.

36. Check to see if a chamber has spill buckets.
37. Check to see if the spill buckets is empty – no dirt, salt, water or fuel. If the spill bucket is not emptied before you leave the site then enter fail here.



## Maine Department of Environmental Protection

# UST Inspector Reference Handbook

38. Check to see if the bucket is liquid tight. A tightness test is not required but indicate fail if the bucket is obviously rusted out or split open or if the drain-back valve has rusted out.
39. Check to see that the lid is not missing, split or chipped. If the lid is missing or there is a chip or split large enough to create an opening into the bucket when the lid is in place, then indicate FAIL.
40. Check to make sure that the lid is not touching the fill cap. (Note: Flipping the lid is a temporary solution to prevent damage to the tank. The problem must be permanently corrected before the system can PASS.)

### Automatic Line Leak Detectors (LLD)

Automatic line leak detectors (LLD'S) are used to continuously monitor pressurized piping systems for catastrophic leaks.

Any product piping systems supplied by a submersible pump must have an automatic line leak detector that signals the pump to either shut down or switch to slow flow if a leak is detected in the piping system.

See the Appendix for website addresses for the various manufacturers where information on test procedures is available.

41. Enter the make and model number of the Automatic Line Leak Detector in the space at the top of the section.
42. Indicate whether the LLD system is mechanical (M) or electronic (E). If one or more of the tanks is not required to have an LLD, enter not applicable (N/A) for those tanks.
43. Check to make sure a line leak detector is present.
44. Check to make sure the LLD is listed for use with the type of piping installed (flexible or rigid).

### For mechanical LLD's

45. Follow the manufacturer's instructions for simulating a 3 gph @ 10 psi leak in the piping system.

For mechanical devices, the test protocol and testing equipment is essentially the same for the various manufacturers.



## Maine Department of Environmental Protection

# UST Inspector Reference Handbook

LLD's that fail to detect and respond properly to a 3 gph leak and cannot be replaced or repaired before you leave the site must receive failing results. Note in comments if you have to replace the LLD.

### For electronic LLD's

46. Check system settings to make sure the settings are correct including pipe type (rigid or flexible), pipe length and leak rate (3 gph? 0.1 gph?)
47. Check to make sure the system shuts down the turbine or alarms when a leak is simulated. For test methods and equipment for electronic LLD's, see the manufacturer's instructions for specific test requirements. (Check the Appendix for a list of manufacturer's websites).

LLD's that fail to detect and respond properly to a leak simulation and cannot be replaced or repaired before you leave the site must receive failing results.

### For tanks with ATG's only

MeDEP regulations require that a tank using an ATG for leak detection and equipped with SW piping, have an electronic LLD that performs a 0.2 gph leak test at least once a month.

Check the test history to confirm the most recent test was passing and was done within the last 30 days.

### Piping on Heating Oil Tanks

48. Copper piping on heating oil tanks is required to be sleeved in all instances where it was installed prior to September 16, 1991. Piping installed after September 16, 1991 must be secondarily contained and continuously electronically monitored to detect leaks.
49. In systems that have SUCTION and RETURN lines, the lines must be isolated from each other by spacers to prevent wear from vibration and friction.

### Stage I Vapor Recovery

Stage I vapor recovery systems are required for gasoline tanks where the monthly gasoline throughput has exceeded 10,000 gallons. Only a few facilities, such as small convenience stores, seasonal businesses and small trucking companies, do not meet the 10,000 gallon cut off.

50. Fill in what the gasoline throughput was for the last calendar year. Also fill in the year.
51. Indicate what type of Stage I Vapor Recovery system is in place – Two Point/Manifold (M) or Coaxial (C).



## Maine Department of Environmental Protection

# UST Inspector Reference Handbook

### For Two Point/Manifold Systems

52. Check to make sure the vapor recovery poppet cap and cap gasket are in place and in working order.
53. Check the vapor recovery poppet by depressing the spring loaded center. The poppet should return to its normal position making a tight seal with the poppet housing.

Missing, dented or cracked poppet gaskets are not acceptable.

54. Check to make sure the manhole cover over the vapor recovery pipe is in good condition. Chipped, cracked or missing covers must be replaced.

### For Coaxial Systems

55. Check to make sure the top of the fill risers are in good condition. The openings must not be bent or damaged. The vapor path formed by the outer pipe must not be constricted.

### For All Systems

56. Check to make sure the fill pipe cap and gasket are present and in working order.
57. Check to make sure there is a drop tube in place.
58. Check to make sure the drop tube ends within 6 inches of the bottom of the tank.

### Dispenser and Crash Valves

A crash valve must be installed on pressurized pipelines serving product dispensers.

First enter the dispenser # at the top of each column. There is space for 8 different dispensers.

At each dispenser answer the following questions:

59. Check to make sure the crash valve is installed at the proper height. The shear valve groove must be level with or a maximum of ½" above or below the top of the dispenser island.
60. Check to make sure the valve is rigidly secured to the island form.
61. Check to make sure the valve can be easily opened and closed by hand.



## Maine Department of Environmental Protection

# UST Inspector Reference Handbook

The valve should be opened and closed several times by hand to assure no gum-deposits or other conditions impair operation of the valve (Caution: Shut off the pumping system before performing this test. Do not open the valve while piping is under pressure.)

62. Check for weeps or leaks at each dispenser. An active weep or leak that is not repaired **FAILS**.

**ATTENTION:** Be sure that you record in the Comments section below the product type for each line that does not pass the three questions above. You will need this information to fill out the summary sheet.

### Corrosion Protection (Galvanic and Impressed Current systems)

Department regulations require cathodically protected tanks and piping be checked every year to make sure they are adequately protected from corrosion.

These checks must be performed by a Maine certified underground tank installer or a Maine certified cathodic protection tester. MeDEP maintains lists of both.

There are two systems of cathodic protection – galvanic and impressed current. The inspection requirements are different for the two systems. Galvanic systems are the most common type, representing over 99% of the cathodic protection systems.

For **Galvanic Systems** do the following:

63. Enter the readings in the top spaces provided.

Follow the instructions given in Appendix A of Chap. 691, Rules for Underground Oil Storage Facilities and perform a structure to soil potential reading for each tank and each piping run that is cathodically protected. Chapter 691 Rules have changed to require a minimum of three (3) readings for each single wall tank, one at each end and one at the midpoint.

Remember the electrode must be in direct contact with clean soil. The readings must be taken over the center line of each tank and piping run.

Wet soil provides better readings. Readings cannot be taken in frozen ground.

Readings less than  $-0.85V$  are failing.

64. and 65. Indicate whether the readings are passing or failing in the space below.

For **Impressed Current Systems** perform the following:



## Maine Department of Environmental Protection

# UST Inspector Reference Handbook

66. Verify that the rectifier has power and is turned on.

*If the system is NOT an Impressed Current System please mark the form where indicated as N/A.*

67. Verify that the facility is performing monthly inspections of the rectifier that involve reading and recording voltage and/or amperage readings. A written log of these inspections must be maintained. Rectifier voltage and/or amperage outputs are compared to the recommended operating levels that were determined during system installation.

To test an **Impressed Current System**, follow the test methods and criteria as described in the National Association of Corrosion Engineers TM 0101-2001, Measurement Techniques Related to Criteria for Cathodic Protection on Underground or Submerged Metallic Tank Systems, or TM 0497-2002, Measurement Techniques Related to Criteria for Cathodic Protection on Underground or Submerged Metallic Piping Systems.

### Out of Service Tanks

Even if product is not being added to or removed from a tank it must be properly maintained.

If the tank and/or piping is cathodically protected, it must be checked yearly to make sure it is still protected from corrosion.

If the tank contains more than one inch of product then leak detection systems must be maintained and checked yearly.

If the tank has been out of service for more than 1 year then the tank owner should contact the Department for permission to keep the tank out of service.

68. Enter the date the tank system was taken out of service. If you are not sure of the exact date explain in the comments section.
69. Does the tank have less than 1" of product? (If the tank contains more than 1" of product then leak detection systems must be maintained. Remember to fill out the appropriate section of the inspection form for the tank leak detection system.)

For tanks out of service more than 3 months check the following.

70. Check to make sure the tank is properly vented and the fill cap locked.

An open vent is required for safety reasons and to prevent damage to the tank.

A locked fill prevents delivery errors and dumping of hazardous waste. It also prevents rainwater from entering the tank by this route.





## Maine Department of Environmental Protection

# UST Inspector Reference Handbook

71. Check to make sure the product piping has been disconnected and capped and the dispensers and manways are secure. (Note: For seasonal tanks, the product piping does not have to be disconnected and capped).

Dispenser covers, manway covers and lids must be in place.

**A FACILITY MUST BE PRECISION TESTED BEFORE IT CAN BE PLACED BACK INTO SERVICE.**

\*\*\*\*\*

After completing the appropriate section of the Inspection Report, fill out the Inspection Summary Report (Page 1). Sign and date the Summary form at the bottom.

### What if the facility **FAILS** the inspection?

Department regulations require prompt repair or replacement of leak detection, spill and overfill prevention equipment.

To notify the Department when deficiencies have been corrected, use the UST Annual Inspection Summary Report form. Check Inspection Update at the top left corner of the table. Appropriate paperwork **MUST** be filed when correcting deficiencies, for example: replacing drop tubes with new tubes and flapper overfill prevention devices.

Fill in the facility name, location (city or town), owner, operator, MeDEP registration number and the telephone number of the owner.

Enter the tank number(s) at the top of the column. Also the tank volume and product stored. Only enter the tanks where work was done to correct deficiencies.

Go to the appropriate page in the UST Inspection report. Indicate Pass for only for the work you did. Describe the work done in the Comments section.

Attach the appropriate page or pages from the UST Annual Inspection Report and the Summary Report.

For instance, if tank 3-1 received a failing result for just Question XX and you had to repair or replace a piping sump probe, indicate Pass for Question XX. Do not enter Pass at the bottom of the Interstitial Monitoring table unless you have checked all the sensors and probes for that tank.

The Summary report Form must be signed and dated by the person who corrected the deficiencies. For deficiencies requiring work by a licensed underground tank installer, the Summary Report Form must be signed and dated by the installer who did the work.



## **Maine Department of Environmental Protection**

# **UST Inspector Reference Handbook**

Examples of work that must be done by an installer include spill bucket replacement; monitoring system repair or replacement (ATG, liquid sensor or LLD); sump repair or replacement; overfill device installation, repair or replacement; crash valve repair or replacement; cathodic protection system repair or replacement (galvanic systems only).

For deficiencies due to missing or incomplete paperwork, the facility owner may submit copies of the required paperwork. This includes daily inventory, groundwater monitoring logs and tank or piping sump manual monitoring logs and rectifier reading logs. If the initial inspection found that records were not being kept or were being kept improperly then the records submitted to correct the deficiency must be dated after the inspection date.

A facility owner can also certify that certain deficiencies were corrected including a missing or worn gauge stick, replacement of the paper roll in an ATG console (print out a report and staple it to the form to show the system is functioning properly), replacement or installation of a monitoring well bailer, cleaning out spill buckets, replacement of spill bucket lids and, on out-of-service tanks, installation of a lock on the fill, replacement of covers on fills, manways, interstitial risers and dispensers and removal and proper disposal of tank contents.

## **THE END**

# Appendix

## CONTENTS

- 1. Daily Inventory/Monthly Fuel Log**
- 2. Interstitial Monitoring Log**
- 3. Monitoring Well Log**
- 4. Monthly Gasoline Throughput Log**
- 5. Information Resources**

## DAILY INVENTORY / MONTHLY FUEL LOG

Month/year\_\_\_\_\_

Facility &amp; Location: \_\_\_\_\_ Registration # \_\_\_\_\_

Tank Size and Fuel type: \_\_\_\_\_ Certified By: \_\_\_\_\_

[illegible]

**Leak Check:** Total Gallons Pumped ( ) X .01 =  
IF SUM OF 'CUMULATIVE OVER OR SHORT" IS GREATER THEN LEAK CHECK RESULT,  
IT IS CONSIDERED EVIDENCE OF A POSSIBLE LEAK AND YOU MUST NOTIFY MEDEP AT  
207-287-2651

# Interstitial Monitoring Log for Doublewalled Systems

Facility Name \_\_\_\_\_

Tank Size \_\_\_\_\_

Location \_\_\_\_\_

Product (s) \_\_\_\_\_

Date	Fuel?	Water?	Initials of Person Sampling Sump

**Instructions:** Use a clean stick, not one that has been used previously in an oil tank. At the very bottom of the stick, dab a small amount of gas paste one side and a small amount of water paste on the other side. Lower the stick to the bottom of the interstitial sump and raise it back up. If either gas paste or water paste has turned color, clean the stick and repeat the procedure. If either the gas paste or the water paste has again turned color then the Department should be promptly notified. Call 1-800-482-0777 as soon as possible and within 24 hours. If the paste has not changed color simply fill in the date in the left-hand column, enter "None" in the product and water columns above and put your initials in the right-hand column. Check weekly.

KEEP THIS COMPLETED FORM ON SITE FOR THREE YEARS

# Monitoring Well Log

**Facility Name:**

**Tank Size:**

**Location:**

**Product (s)**

<b>Date</b>	<b>Well #</b>	<b>Floating Oil? Yes/No</b>	<b>Petroleum Odor? Yes/No</b>	<b>Initial of Person Sampling Well</b>

Instructions: Bailer should remain in well or be stored in a safe, clean location between sampling to prevent contamination and damage or loss. To check monitoring well, remove bailer from well and check for floating oil. If none then empty bailer and lower into well again. Remove bailer again, check for floating oil pour contents into paper cup. Check for odor of petroleum. If floating oil or a petroleum odor is detected then pour sample back into well. Notify the Department promptly by calling 1-800-482-0777 as soon as possible and within 24 hours.

**KEEP THIS COMPLETED FORM ON SITE FOR THREE YEARS**

## MONTHLY GASOLINE THROUGHPUT LOG

**Facility:** \_\_\_\_\_ **Registration Number:** \_\_\_\_\_

**Location:** \_\_\_\_\_

### Gallons Pumped From Each Tank

20_____	Tank #	Tank #	Tank #	Tank #	Tank #	Tank #	Monthly Total
January							
February							
March							
April							
May							
June							
July							
August							
September							
October							
November							
December							
						<b>Total Volume</b>	

### Instructions for Log Sheet #2

Department of Environmental Protection Regulation 118 "Gasoline Service Station Vapor Control", administered by the Bureau of Air Quality Control, requires all gasoline dispensing facilities to keep records of the amount of gasoline that is dispensed each month. These records must be available for inspection and copies provided to Department staff upon request.

To calculate the monthly volume of gasoline dispensed at the Station, fill in the sum of the **Gallons Pumped** from the **Monthly Fuel Report/Daily Inventory** for each gasoline tank for the appropriate month. Add the monthly gallons pumped for all gasoline tanks at the station and place the sum in the Monthly Total box. At the end of the year, add the monthly totals and place the sum in the **Annual Total** box. Do not include volume of diesel fuel, K-1 or any fuel dispensed other than gasoline on this sheet.

Some vapor control is required at stations with an annual throughput greater than 100,000 gallons. See the regulation for details or contact DEP/Air Bureau office in Augusta, Bangor, Portland, or Presque Isle.



# Information Sources

## Underground Oil Storage Facilities

(As of May 1, 2001)

### Contacts

Ameron		
Containment Solutions	Bob Upton	800-628-2657 x213
Drummond		800-361-5050 x305
FE Petro		608-838-8786
Highland	Todd Shearer	717-664-0600
Mohawk Metal	John Millet	800-765-3110
Permatank	Steve Abrams	847-438-8265 x232
Plasteel	Rick Sharpe	760-729-1093
Scully		1-800-272-8559
Steel Tank Institute (STI)	Lorri Grainawi	847-438-8265
Total Containment	Allan Copenhaver	877-668-6825
TANX	Bill Johnson	603-543-1272
Xerxes Corp.	John Burwell	612-887-1836

### Websites

Ameron	<a href="http://www.ameronfpd.com">www.ameronfpd.com</a>
FE Petro	<a href="http://www.fepetro.com/index.html">www.fepetro.com/index.html</a>
National Workgroup on Leak Detection Evaluations	<a href="http://www.nwglde.org">www.nwglde.org</a>
Steel Tank Institute (STI)	<a href="http://www.steeltank.com">www.steeltank.com</a>
Scully	<a href="http://www.scully.com/ct_index.html">http://www.scully.com/ct_index.html</a>
Veeder-Root	<a href="http://vrnoteswebl.veeder.com/vrdocrep.nsf/docbycat.html">http://vrnoteswebl.veeder.com/vrdocrep.nsf/docbycat.html</a>
Xerxes	<a href="http://www.xerxescorp.com/noframes/pindex.htm">www.xerxescorp.com/noframes/pindex.htm</a>